

TRANSGENIC ANIMAL ASSAY SYSTEM FOR
ANTI-CHOLINESTERASE SUBSTANCES

ABSTRACT OF THE DISCLOSURE

5 The present invention relates to novel
alternative forms of human acetylcholinesterase (AChE) and
nucleotide sequences encoding the same. The genes encoding
the novel forms of human AChE have been identified in
various malignant tumor cells. In a further aspect, the
10 invention relates to a transgenic animal assay system for
evaluating efficacy of drugs against cholinergic proteins,
prior to or in the course of therapeutic treatment.
Transgenic animals, preferably developing tadpole of
Xenopus or mice which express human AChE, are used. The
15 transgenic animal assay system is also useful for
evaluating the toxicity of substances which potentially
block human AChE (e.g. organophosphorous compounds).